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10/531,667

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John S. Bambini

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FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

JIANG, YONG HANG

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b> 10/531,667	<b>Applicant(s)</b> BAMBINI ET AL.	
	<b>Examiner</b> YONG HANG JIANG	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/28/2009 &amp; 10/22/2009</u> .                              | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed 7/6/2009 has been entered. Claims 1, 5, 12, 17, and 21 are amended. Claims 4 and 20 are cancelled. Claims 27-28 are newly added. Claims 1-3, 5-19, and 21-28 are now pending.

### ***Response to Arguments***

Applicant's arguments filed 7/6/2009 have been fully considered but they are not persuasive.

In response to the applicants concerns on the last paragraph of page 9, the examiner has relied on Kirkland (2002/0180600) to the rejections made in this office action.

Applicant argues on the 1<sup>st</sup> paragraph of page 10 that "energizing a portable receiver at a predetermined interval in a one way communication system is not the same...to place the wireless control system in the receiving mode in response to the user input to actuate the remote electronic system". The examiner is not explicitly stating they are the same. However, modifying the combination of Dykema and Kirkland to include "the wireless control system configured to be placed in a receiving mode in response to a user input to actuate the remote electronic system" only requires rudimentary skill to one of ordinary skill in the art at the time the invention was made. One of ordinary skill in the art would recognize the need to place the wireless control system in the receiving mode, in response to the user input to actuate the remote



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electronic system when combining the two references, to see if the remote electronic system has been properly actuated or not.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claim 1-3, 6-8, 10-19, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema et al. (US 6,091,343), and further in view of Kirkland et al. (US 2002/0180600).

Regarding claim 1, 10, 12-13, and 17, Dykema discloses a wireless control system for mounting in a vehicle (via remote control system operated by trainable transmitter 43, the system may be installed in a vehicle console, See Fig. 1) for wireless



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control of a remote electronic system being a garage door opener (See Col. 3, lines 16-20), comprising:

- an operator input device configured to receive a user input to actuate the remote electronic system (via pushbutton switches 44, 46, and 47, See Col. 4, line 64 to Col. 5, line 4);

- a computer coupled to a vehicle interior element (see figure 1);

- a trainable transmitter circuit (via transmitting circuitry on trainable transmitter 43 to transmit signals to operate a garage door, See Col. 8, lines 53-59 and Col. 5, lines 1-4) configured to transmit a wireless control signal to the remote electronic system in response to the user input via the operator input device (via pushbutton switches 44, 46, and 47, See Col. 4, line 64 to Col. 5, line 4), the wireless control signal having control data which will control the remote electronic system (switches 44, 46, and 47 may each be associated with a separate garage door or other device to be controlled, Col. 5, lines 1-4);

- a receiver circuit to receive a wireless signal (via receiving antenna 130, See Col. 5, lines 59-65); and

- a control circuit coupled to the operator input device, the trainable transmitter circuit and the receiver circuit, the control circuit being configured to transmit the wireless control signal through the trainable transmitter circuit and to receive the wireless signal through the receive circuit (via controller 110 coupled to the transmitter, user interface 120, and the receiver, See Figure 5).



Dykema did not specifically disclose the receiver circuit is further configured to receive a wireless status signal including status data for the remote electronic system sent in response to the wireless control signal; and the control circuit is configured to receive the wireless status signal through the receiver circuit.

Kirkland et al. teach a remote door monitoring system comprising a sensor and a transmitter on an automatic garage door. A transmitter assembly senses and transmits the sensed position of the door position in a periodic manner at a predetermined transmit interval to a remote receiver. A remote receiver including a receiver module receives the transmitted door position signals and outputs the result to a user. (See the Abstract and Figures 1 and 2; Paragraphs 17-30)

From the teachings of Kirkland, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Dykema to include the receiver circuit is further configured to receive a wireless status signal including status data for the remote electronic system sent in response to the wireless control signal; and the control circuit is configured to receive the wireless status signal through the receiver circuit in order to know the position of the garage door as taught by Kirkland to use a wireless transmitter to know the status of a movable barrier, thereby improving the security of the system.

The combination of Dykema and Kirkland did not specifically disclose the control circuit in the wireless control system is configured to be placed in a receiving mode in response to the user input to actuate the remote electronic system. However, in view of the teachings of Dykema and Kirkland, one of ordinary skill in the art would recognize



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the need to place the wireless control system in the receiving mode, in response to the user input to actuate the remote electronic system when combining the two references, to see if the remote electronic system has been properly actuated or not. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the control circuit in the wireless control system is configured to be placed in a receiving mode in response to the user input to actuate the remote electronic system in order to verify the operation of the remote electronic system, thereby improving system security.

Regarding claim 2-3 and 19, Dykema discloses the system further comprising a vehicle interior element coupled to the transmitter circuit and the control circuit, wherein the wireless control system is configured for mounting in a vehicle interior, and the vehicle interior element is an overhead console (See Col. 4, line 64 to Col. 5 line 12, and Figure 1).

Regarding claim 6, 16, and 22, Dykema discloses the receiver circuit is further configured to receive a wireless signal, wherein the control circuit is configured to identify and store a data code on the wireless signal (via trainable transmitter learning a new code, See Col. 5, lines 59-65), and wherein the wireless control signal transmitted by the trainable transmitter circuit includes the stored data code (via trainable transmitter transmitting stored learnt code, See Col. 3, lines 17-21).

Regarding claim 7-8, and 14-15, Dykema teaches the system further includes a user interface (120), the user interface includes indicating devices such as LED (48) to display information. (See Col. 5, lines 39-44)



From the teachings of Dykema, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the wireless control system further includes a display configured to display an indicia based on the contents of the wireless status signal, and the display being a light emitting diode as taught by Dykema to use light emitting diodes to display information to a user.

Regarding claim 11, and 18, the combination of Dykema and Kirkland teach a system to provide status of a movable barrier; therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to include the wireless status signal is an indication that a garage door has successfully closed in order to allow an operator to see the status of the of the garage door, thereby increasing safety.

Regarding claim 23, Dykema teaches the system further includes a user interface (120), the user interface may include a display for displaying more explicit instructions and information to a user. (See Col. 5, lines 39-44)

From the teachings of Dykema, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the computer further includes a display configured to display an indicia based on the contents of the wireless status signal in order to provide the information to a user, thereby providing the user feedback on what the status is.

2. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema in view of Kirkland as applied to claim 23 above, and further in view of Higginbotham et al. (US 5,896,575).



Regarding claim 24, the combination of Dykema and Kirkland did not specifically disclose the display is a liquid crystal display.

Higginbotham teach a portable electronic device may use conventional liquid crystal display (LCD) technology to display information. (See the Abstract and Figure 1-2; and Col. 3, line 6-7)

From the teachings of Higginbotham, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the display is a liquid crystal display in order to use a conventionally used display, thereby making the display design more simple.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema in view of Kirkland as applied to claim 1, and 7-8 above, and further in view of Verzulli (US 6,426,820).

Regarding claim 9, the combination of Dykema and Kirkland did not specifically disclose the light emitting diode is configured to display different colors based on the contents of the wireless status signal.

Verzulli teach using a LED as a visual status indicator (24) on a remote control. The LED may have one or more colors for displaying information. (See Col. 3, lines 34-43)

From the teachings of Verzulli, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the light emitting diode is configured to display different colors



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based on the contents of the wireless status signal as taught by Verzulli to display different information with different colors.

4. Claim 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema in view of Kirkland as applied to claim 17, and 23-24 above, and further in view of Wortham (US 5,905,433).

Regarding claim 25, the combination of Dykema and Kirkland did not specifically disclose the liquid display is configured to display an alphanumeric message based on the content of the wireless status signal.

Wortham teaches alphanumeric codes may be used to uniquely identify information. (See Col. 4, lines 20-28)

From the teachings of Wortham, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the liquid display is configured to display an alphanumeric message based on the content of the wireless status signal in order to uniquely identify a message, thereby avoiding confusion to a user.

Regarding claim 26, the combination of Dykema and Kirkland teach a system to provide status of a movable barrier; therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to include the wireless status signal is an indication that a garage door has successfully closed in order to allow an operator to see the status of the of the garage door, thereby increasing safety.



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5. Claim 5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema in view of Kirkland as applied to claim 1-4 and 17-20 above, and further in view of Suman et al. (US 6,028,537).

Regarding claim 5 and 21, the combination of Dykema and Kirkland did not specifically disclose the control circuit is configured to retransmit the wireless control signal if the wireless status signal has not been received within a specified time after entering the receiving mode.

Suman teach a communication and remote control system. A control signal from a control center may be retransmitted to a vehicle if no acknowledgement is received by the control center between a predetermined time period. (See Col. 56, lines 9-29)

From the teachings of Suman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the control circuit is configured to retransmit the wireless control signal if the wireless status signal has not been received within a specified time after entering the receiving mode as taught by Suman to retransmit a signal if the first transmission is not successful, thereby increasing the chance of successful transmission.

6. Claim 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema in view of Kirkland as applied to claim 1 and 11 above, and further in view of Kackman (US 5,761,206).

Regarding claims 27 and 28, the combination of Dykema and Kirkland discloses receiving a wireless status signal, but did not specifically disclose the wireless status



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signal indicating whether the remote electronic system failed to actuate and a reason for the failure to actuate.

Kackman teaches that in a security or monitoring system with a plurality of sensors, the transmitter on the system may transmit one or more message packets to a system controller, each message packet typically including information about the nature of the problem. (See Col. 1, lines 10-28)

From the teachings of Kackman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Dykema and Kirkland to include the wireless status signal indicating whether the remote electronic system failed to actuate and a reason for the failure to actuate as taught by Kackman to utilize message packets to provide information on errors, thereby providing more information to a user.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONG HANG JIANG whose telephone number is (571)270-3024. The examiner can normally be reached on M-F 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. J./  
Examiner, Art Unit 2612

/Brian A Zimmerman/  
Supervisory Patent Examiner, Art Unit 2612